

ABSTRACT OF THE DISCLOSURE

A microorganism that is a mutant bacterial strain of the species *Actinosynnema pretiosum*, designated PF4-4, (ATCC PTA-3921), being capable of producing maytansinoid ansamitocins such as ansamitocin P-3 in improved yield compared to previous known strains, and capable of growth under varied culture conditions, and methods of producing maytansinoid ansamitocins by culturing PF4-4 in a suitable growth medium.